

WHAT IS CLAIMED IS:

1. An image processing apparatus comprising:
  - a variable-length compression section which performs variable-length compression on image data of each block included in one page;
  - an adjusting section which adjusts each block to a constant data length by adding a bit to or truncating part of a variable-length code of each block obtained by compression by the variable-length compression section;
  - a bit-length storage which stores a data length of the bit added by the adjusting section to the variable-length code of each block;
  - a determination section which determines whether the adjusting section has added respective bits to all blocks included in the one page;
  - a variable-length-code storage which stores variable-length codes obtained by erasing the added bits from the variable-length codes of the all blocks;
  - and
  - a block-data-length conversion section which adds respective bits of different data lengths to variable-length codes of blocks read from the variable-length-code storage, converting data lengths of the blocks into a shorter constant data length than the constant data length, if the determination section determines that the respective bits are added to the

all blocks, the different data lengths being obtained by subtracting a shortest data length from a data length of each block stored in the bit-length storage.

2. The image processing apparatus according to claim 1, wherein if the determination section determines that the respective bits are not added to the all blocks, the block-data-length conversion section adds respective bits of data lengths, stored in the bit-length storage, to the variable-length codes of the blocks read from the variable-length-code storage, converting the data length of each block into the constant data length.

3. The image processing apparatus according to claim 1, wherein the block-data-length conversion section erases the added bit from each variable-length code of the constant data length, based on the data length of each bit stored in the bit-length storage and stores the variable-length code in the variable-length-code storage.

4. The image processing apparatus according to claim 1, further comprising:

a page memory which temporarily stores the variable-length code of each block, the variable-length code having the constant data length; and  
an erasure section which erases, before printing, the bit added to the variable-length code of each block supplied from the page memory, based on a determination

result of the determination section and the data length of each bit stored in the bit-length storage.

5        5. The image processing apparatus according to claim 1, wherein the variable-length compression section performs joint photographic experts group processing.